

PedPDX

PORTLAND'S CITYWIDE PEDESTRIAN PLAN



COMMUNITY ADVISORY COMMITTEE

September 2018

PBOT
PORTLAND BUREAU OF TRANSPORTATION

The background is a teal-colored map of a city. It features a dense grid of streets, a winding river, and a prominent bridge crossing the river. The map is rendered in a light, almost white, line-art style against the teal background.

Project status and schedule overview

Project timeline

Project Kickoff	Walking Priorities Survey	Ped. Policy and Program Review	Mission Vision Goals	Safety Analysis	Walking Stories	Priority Network and Needs	Prioritize Needs	Ped. Toolbox	Perf. Measures	Draft Plan
Summer 2017	Summer/Fall 2017	Fall 2017	Winter 2017-18	Winter 2018	Winter/Spring 2018	Spring/Summer 2018*	Spring/Summer 2018	Sept./Oct. 2018	October 2018	Nov./Dec. 2018

Complete

Remaining

* Final comments from neighborhood coalitions expected by end of September

Project timeline

Project Kickoff	Walking Priorities Survey	Ped. Policy and Program Review	Mission Vision Goals	Safety Analysis	Walking Stories	Priority Network and Needs	Prioritize Needs	Ped. Toolbox	Perf. Measures	Draft Plan
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Complete

* Final comments from neighborhood coalitions expected by end of September

Remaining

September Meeting:

- Final refinements to prioritization
- Toolbox brainstorming

October Meeting:

- Show final draft map/list of priorities
- Review toolbox outline and mockup

November Meeting:

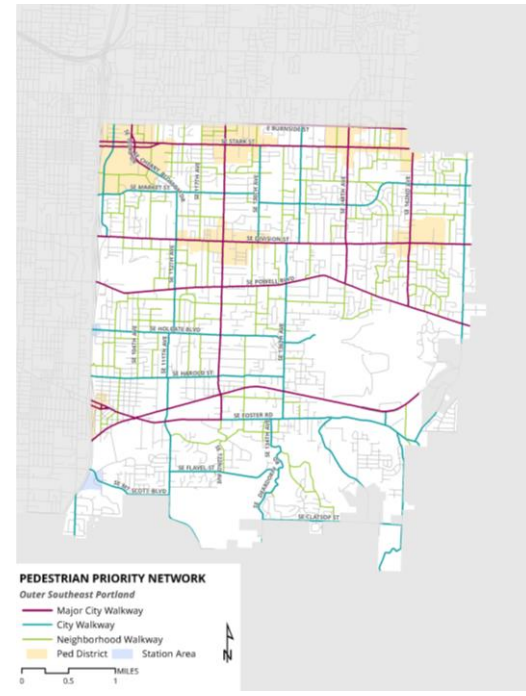
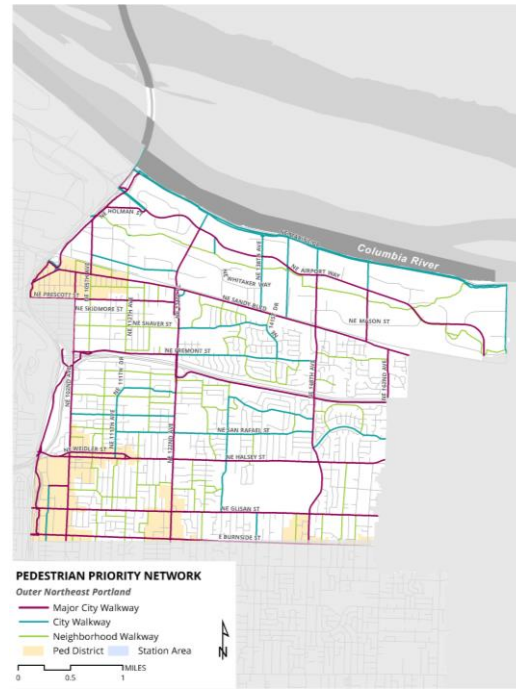
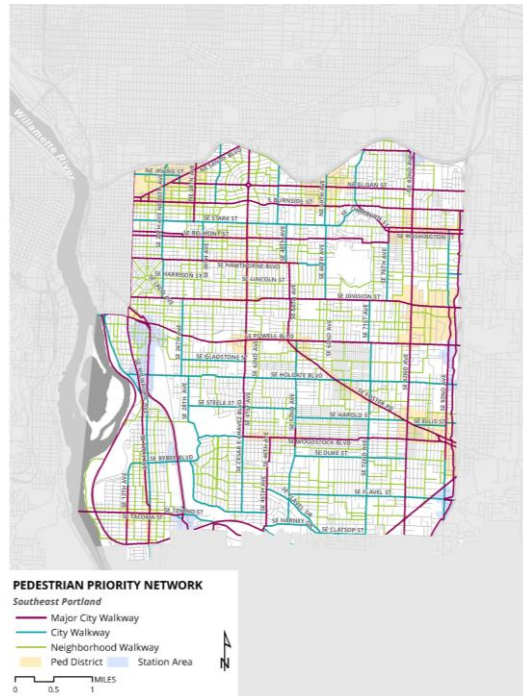
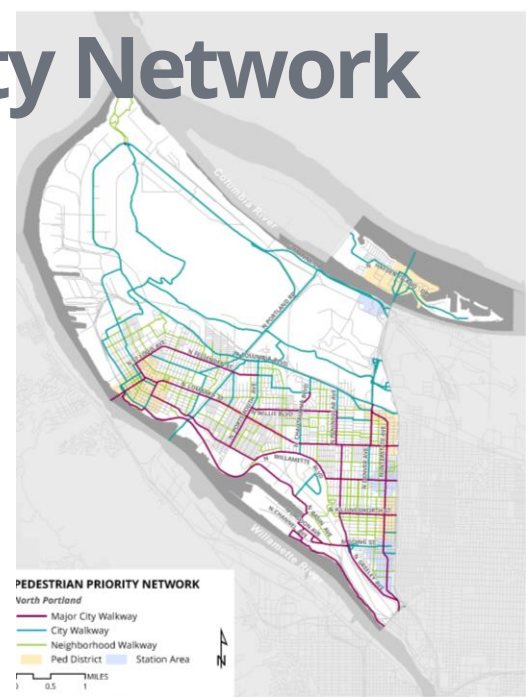
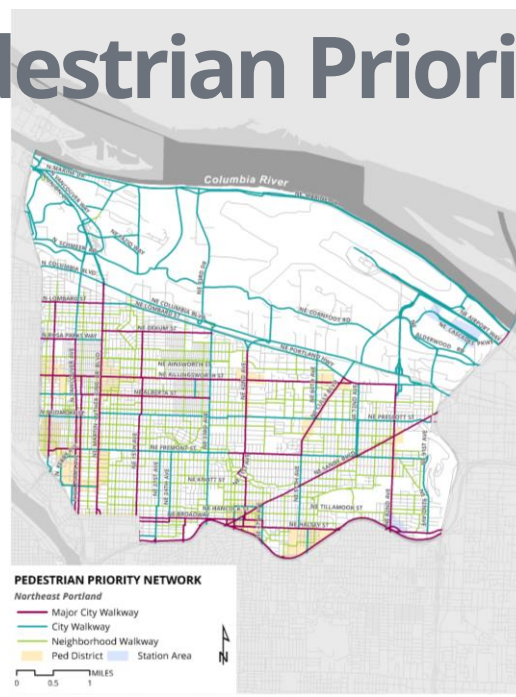
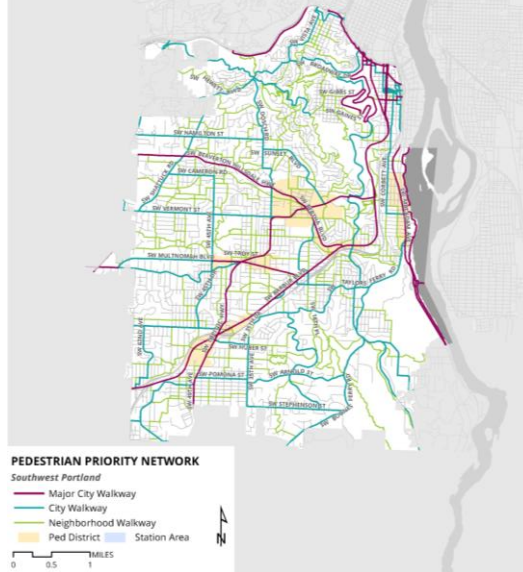
- Review final draft toolbox
- Review full draft plan

December: Release draft plan for public comment!

Summary of summer outreach activities



Refining the Pedestrian Priority Network





How will we address needs within the Pedestrian Priority Network?

**Where we left off with
prioritization**

DRAFT

PEDESTRIAN NETWORK: SAFETY

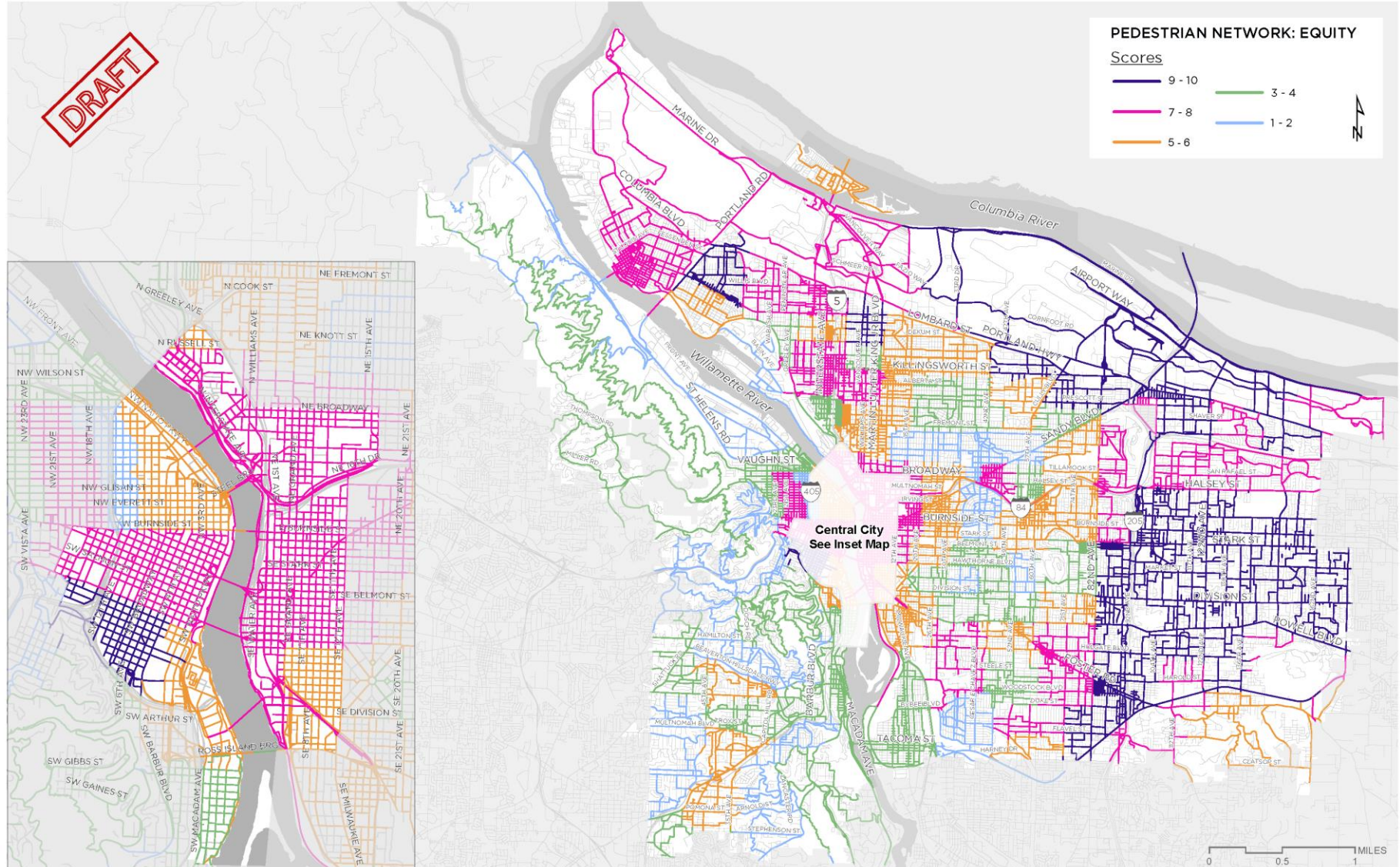
Scores

- 9 - 10
- 7 - 8
- 5 - 6
- 3 - 4
- 1 - 2

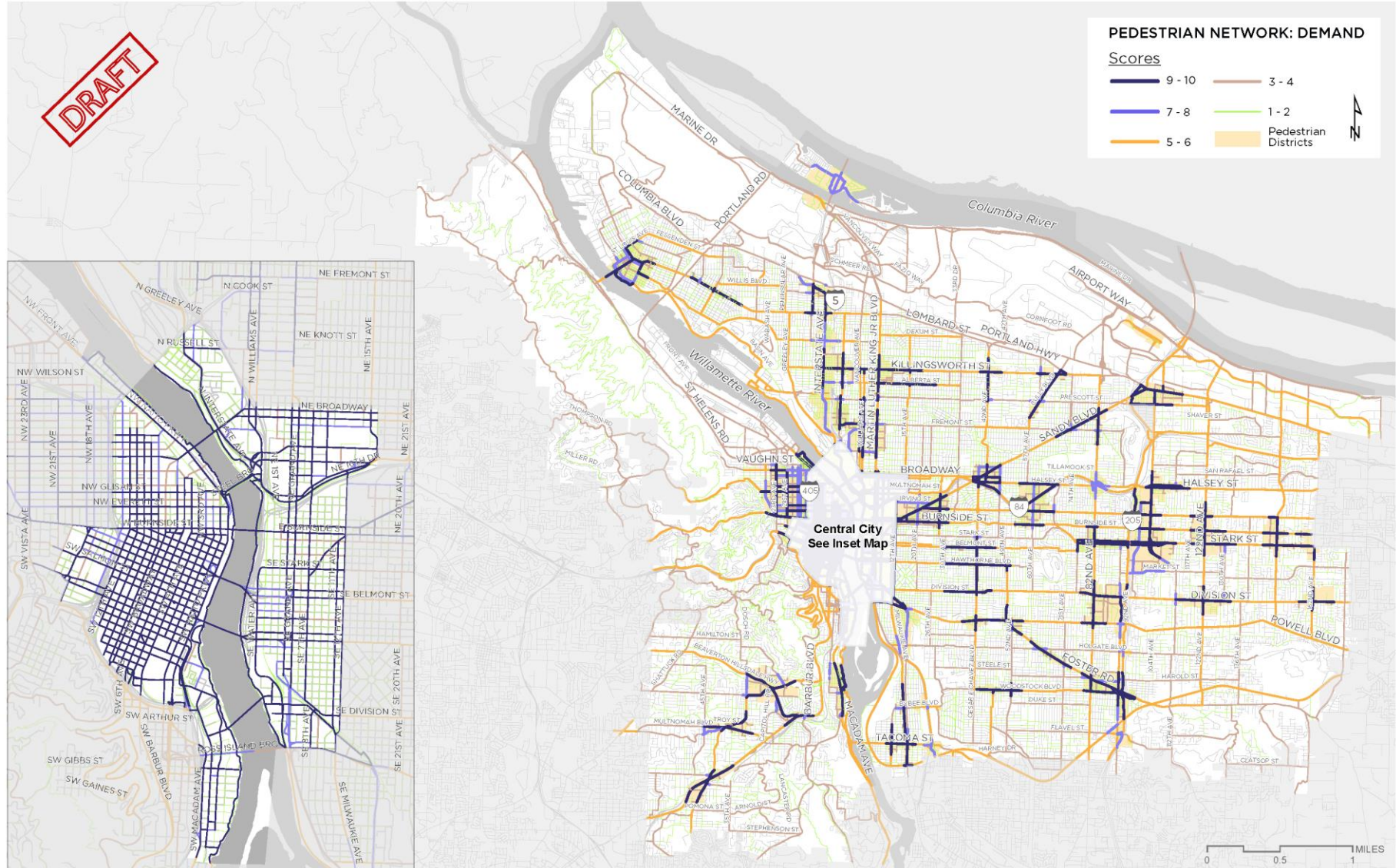
Central City
See Inset Map

0 0.5 1 MILES

Equity



Demand



Feedback from CAC/TAC in May

TAC and CAC comment: Provide more scoring differentiation within the # lanes and speed criteria.

PedPDX team response: Agreed. We are updated the scoring to provide more points to roadway segments with 4 or more lanes and with higher posted speeds

Condition	Safety Score
<i>Collision-based Factors</i>	
Pedestrian High Crash Network	3
Street segments with <u>one</u> KSI pedestrian collision	1
Street segments with <u>multiple</u> KSI pedestrian collision	3
<i>Risk Factors</i>	
Streets with three or more travel lanes	2
Locations with posted speeds of 30 mph or higher	2
<i>Off-Street Factor</i>	
Trail segments separated from motor vehicles	2
Overall Safety Score	Sum (0 to 10)

Feedback from CAC/TAC in May

TAC comment: Increase the scoring weight for systemic safety risk factors to prioritize improvements that could prevent future collisions.

PedPDX team response: CAC divided on we should give more weight to risk-based factors or collision-based factors. Team will defer to the TAC's preference to give more weight to risk factors potentially correlated with crashes.

Our revised safety scoring is: Risk factors = 60%; Collision based factors = 40%

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Locations with posted speeds of 30 mph or higher	2
<i>Off-Street Factor</i>	
Trail segments separated from motor vehicles	2
Overall Safety Score	Sum (0 to 10)

Feedback from CAC/TAC in May

CAC comment: Consider including vehicle volume in safety risk factors.

PedPDX team response: Our ADT (Average Daily Traffic) data is incomplete, and therefore potentially problematic for use in prioritization. The citywide safety analysis did evaluate the relationship of ADT to pedestrian crashes, and found that it was highly correlated with roadway width and vehicle speed.

This strong correlation combined with the unreliability of the data has led the team to decide not to include vehicle volume in the safety criteria.

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<i>Off-Street Factor</i>	
Trail segments separated from motor vehicles	2
Overall Safety Score	Sum (0 to 10)

Feedback from CAC/TAC in May

CAC feedback: Provide fewer safety points for trails

PedPDX team response: Trails that receive the baseline 2 points for safety must also receive points for equity and demand to be prioritized. Our current prioritization results in just a couple of off-street trails scoring within Tier 3. To score this high, these trails must be located within our top 2 equity tiers, AND be designated as Major City Walkways, AND be located within a Pedestrian District/Transit Station Area. Trails meeting all of these high-scoring criteria should receive the baseline safety criteria scoring of 2 points to keep these off-street routes competitive for funding.

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Locations with posted speeds of 30 mph or higher	2
<i>Off-Street Factor</i>	
Trail segments separated from motor vehicles	2
Overall Safety Score	Sum (0 to 10)

Feedback from CAC/TAC in May

CAC feedback: Consider affordable housing locations when evaluating equity.

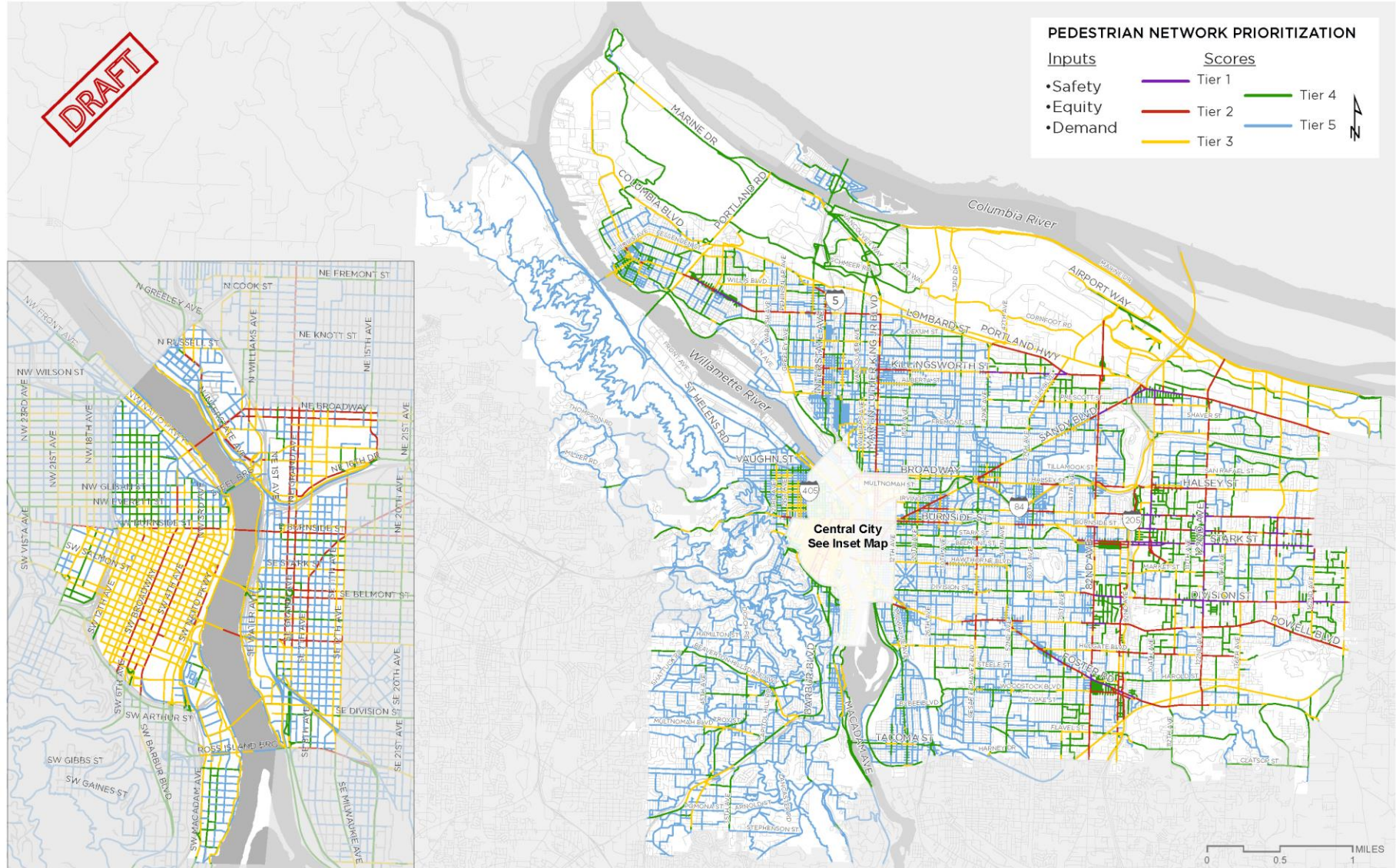
PedPDX team response: Agree that affordable housing is an important pedestrian generator. While not a factor in the broader equity matrix, affordable housing locations will be a factor within the bi-annual PedPDX implementation plan.

Feedback from CAC/TAC in May

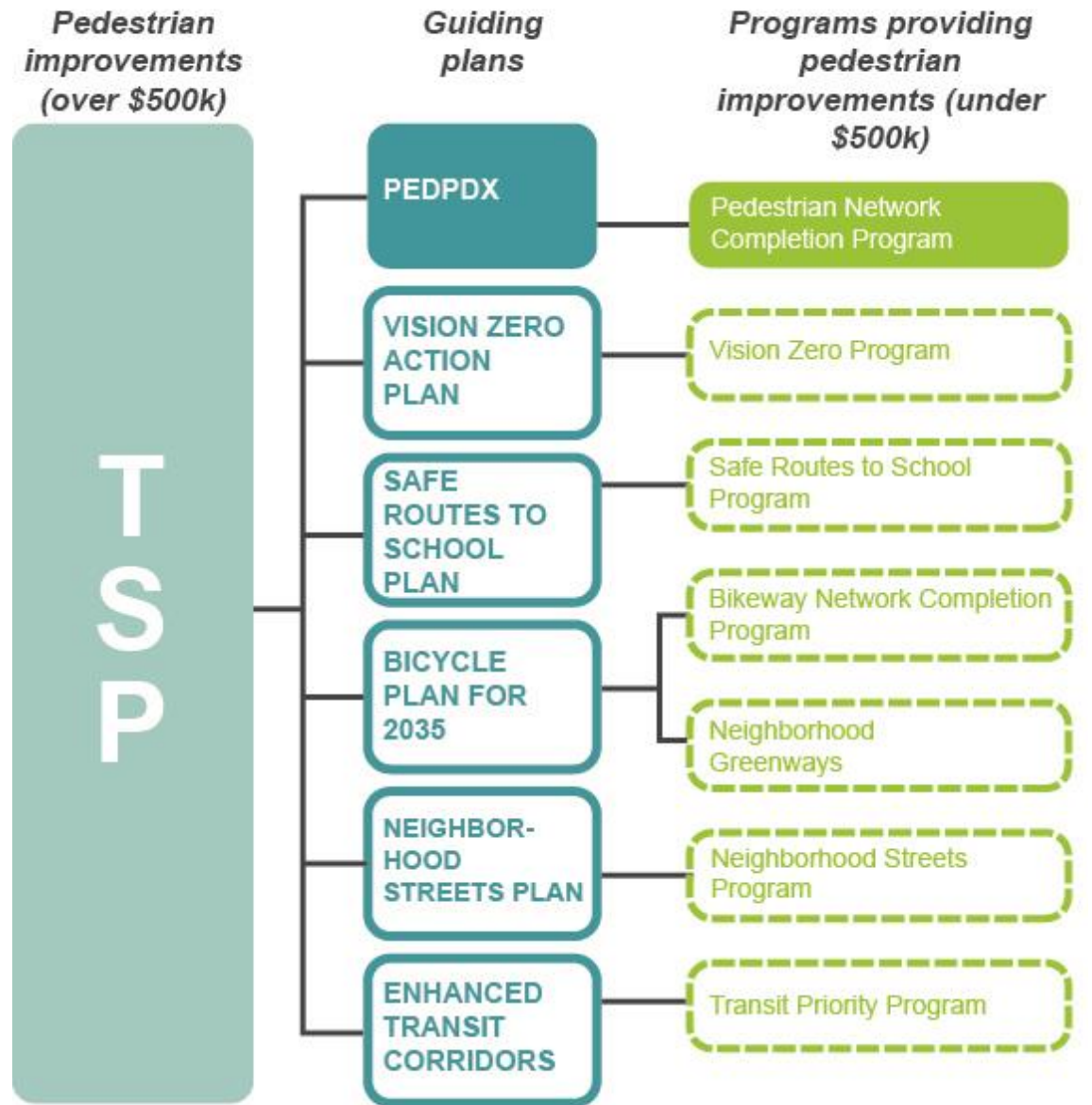
TAC and CAC feedback: The project team asked both committees whether the combined prioritization (safety + equity + demand) should be weighed evenly, or whether we should double the weight for our equity criteria.

PedPDX team response: Due to the lack of clear support for increasing the weight of the equity criteria combined with the minimal impact on outcomes
The project team has decided to weigh safety, equity, and demand evenly in the combined prioritization.

Safety + Equity + Demand



How the Ped Priority Network and prioritization will guide PBOT pedestrian improvements



Programs that will provide ped improvements network-wide:

Pedestrian Network Completion Program

Vision Zero Program

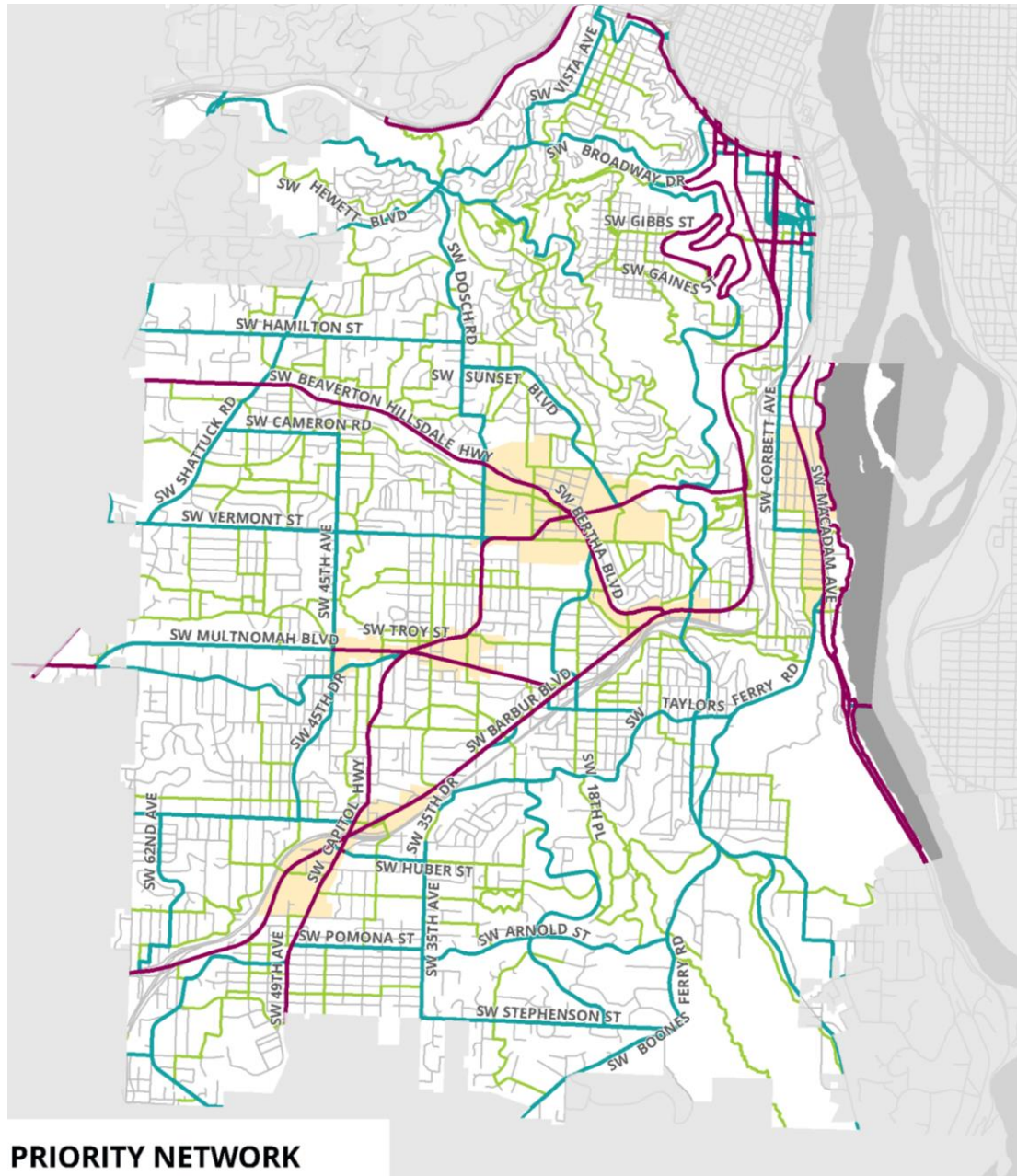
Safe Routes to School Program

Bikeway Network Completion Program

Neighborhood Greenways

Neighborhood Streets Program

Transit Priority Program



PRIORITY NETWORK

PedPDX prioritized needs

Pedestrian
improvements
(over \$500k)

PEDPDX

T
S
P

Programs providing
pedestrian
improvements (under
\$500k)

- Pedestrian Network Completion Program
- Vision Zero Program
- Safe Routes to School Program
- Bikeway Network Completion Program
- Neighborhood Greenways
- Neighborhood Streets Program
- Transit Priority Program

PEDESTRIAN NETWORK PRIORITIZATION

Inputs

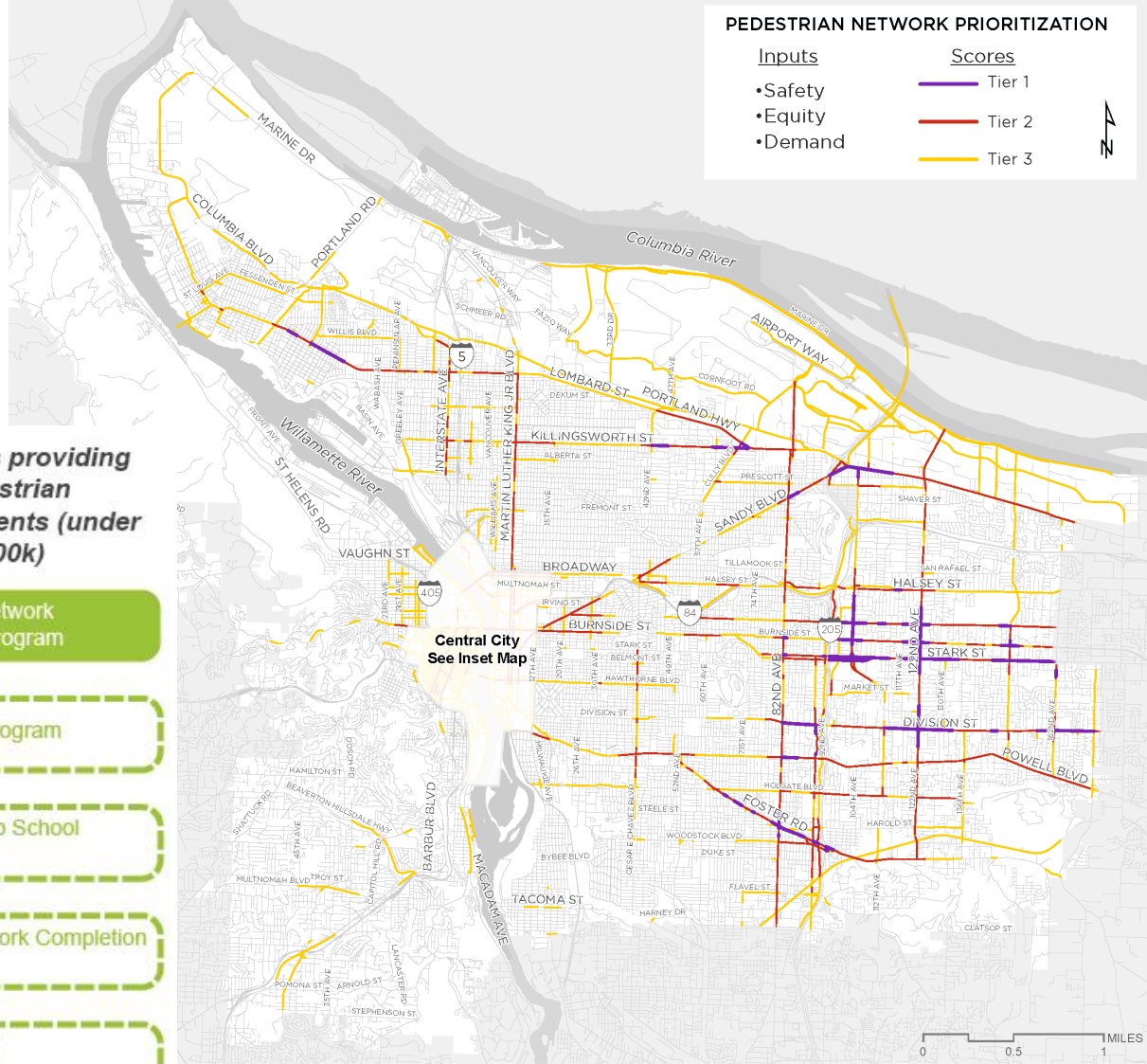
- Safety
- Equity
- Demand

Scores

Tier 1

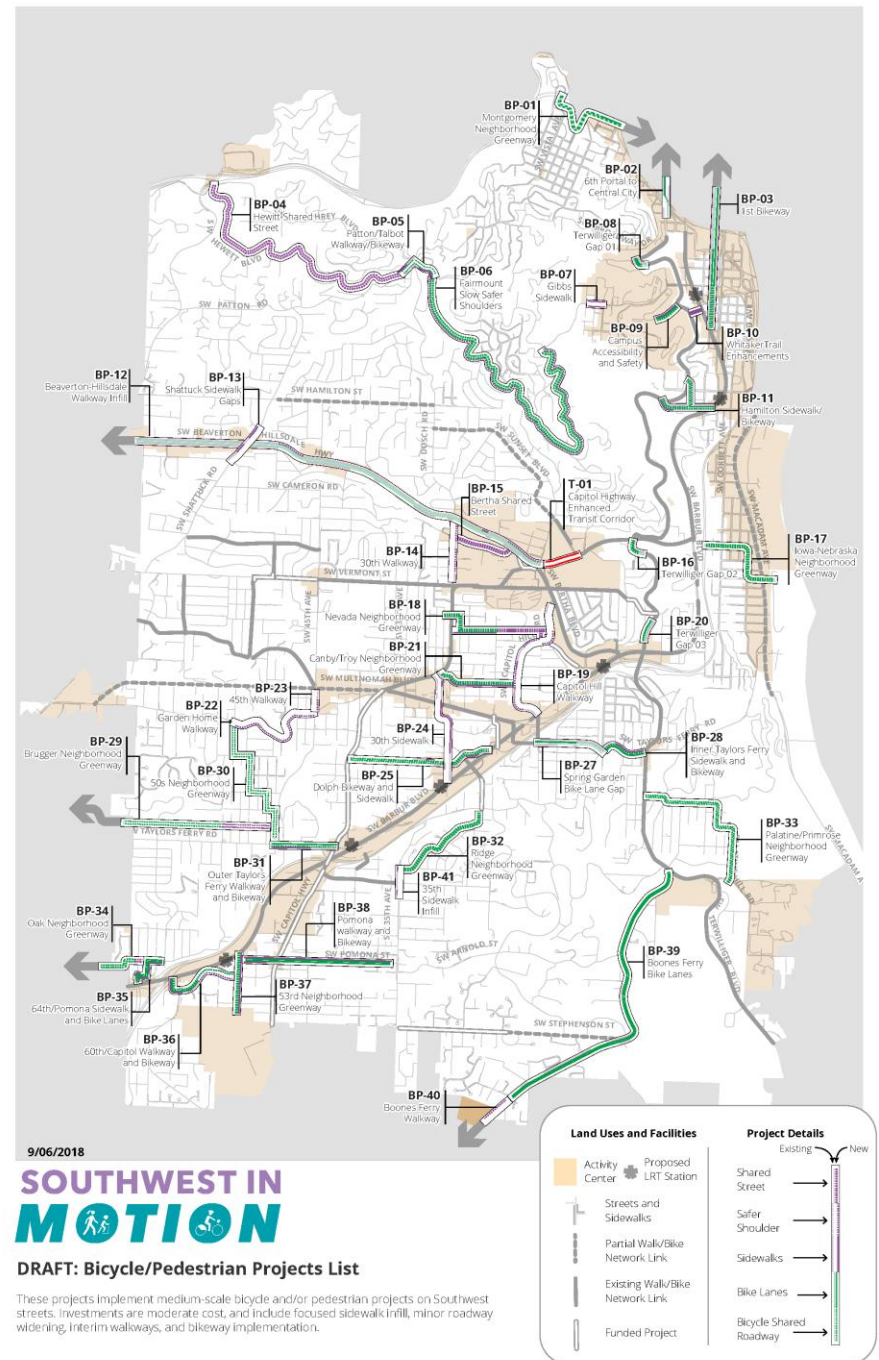
Tier 2

Tier 3



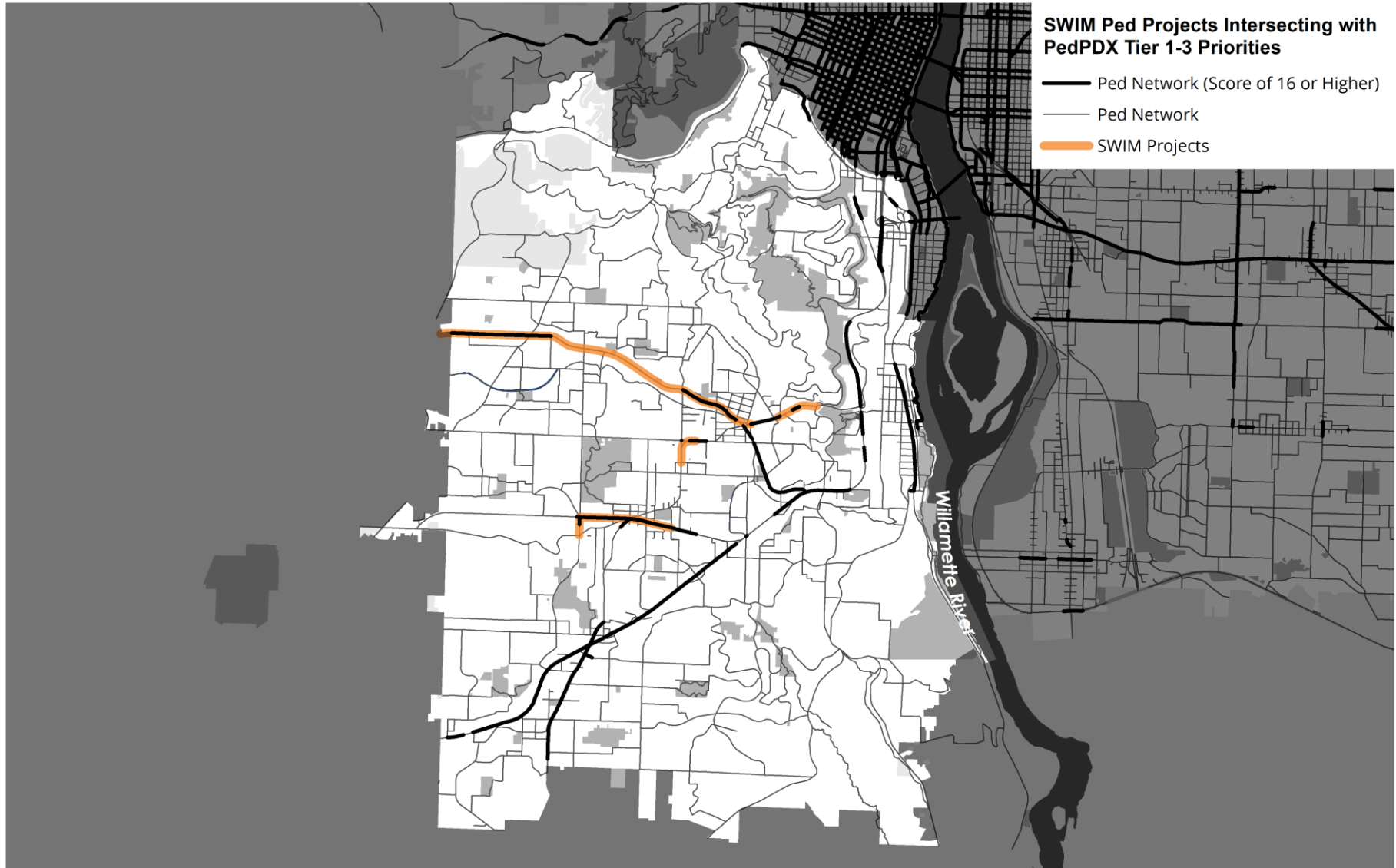
Example:

SWIM project in PedPDX prioritized segments



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SWIM project in PedPDX prioritized segments

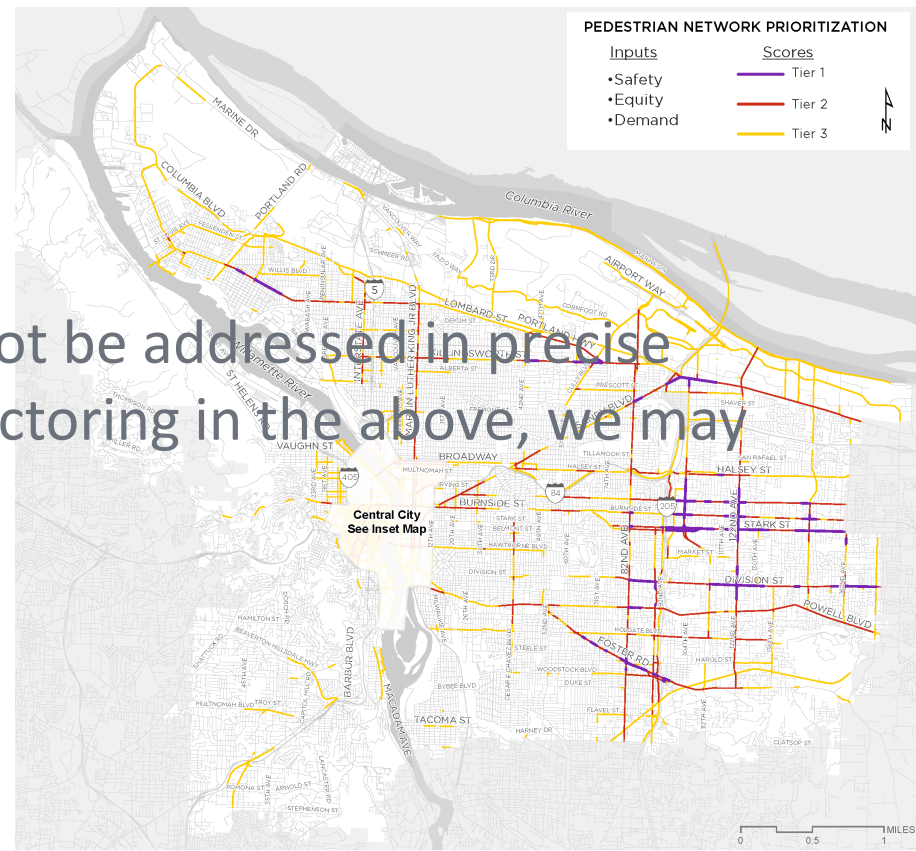


Implementing PedPDX priorities

- PedPDX Implementation Plan to be developed bi-annually
- Allows us to regularly update our safety and equity data (keeps the Plan relevant)

Implementing PedPDX priorities

- Safety + Equity + Demand will yield our tiered priorities, HOWEVER
- Other factors will also be considered when determining which priorities we address first, including
 - Project readiness/feasibility
 - Funding availability
 - Leverage opportunities
 - Key destinations/generators
- Tiered priorities therefore may not be addressed in precise numbered order (for example, factoring in the above, we may address a Tier 3 before a Tier 1)



Questions?



Prioritization outcomes in Southwest

Prioritization outcomes in Southwest

PEDESTRIAN NETWORK PRIORITIZATION

Inputs

• Safety

• Equity


• Demand

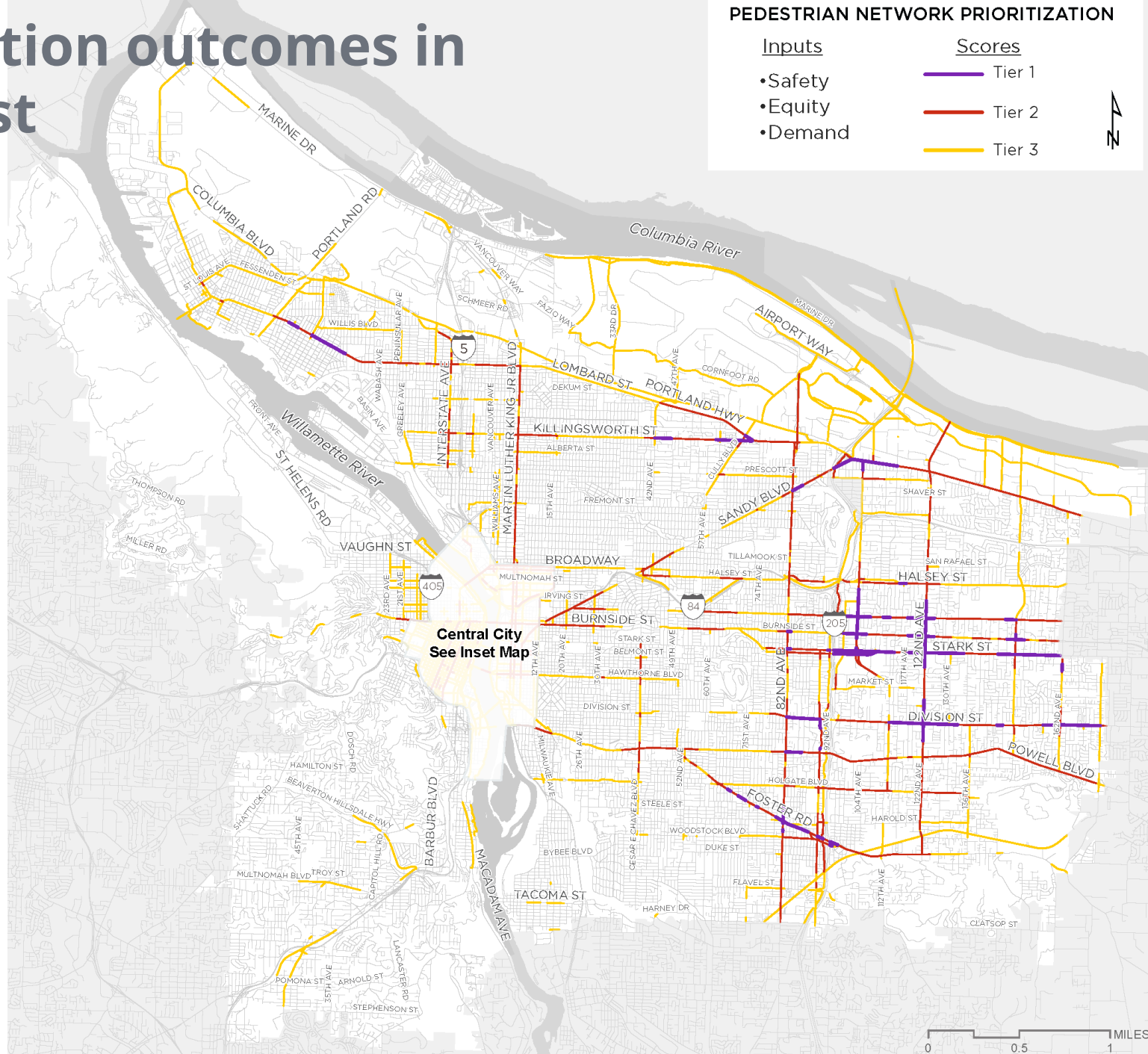
Scores

Tier 1

Tier 2

Tier 3





Suggested Equity Factors

Discussed at May CAC meeting:

- Census tracts vs. blocks
- Disability
- Affordable housing locations
- Age (youth and seniors)

Additional suggested factors:

- BPS displacement vulnerability mapping
- Housing cost burden
- Renters (used in SWIM)
- School free and reduced lunch
- Normalizing race/income data by population (used in SWIM)



Equity factors explored with CAC in May

Suggested factor:

Use census block data instead of census tracts

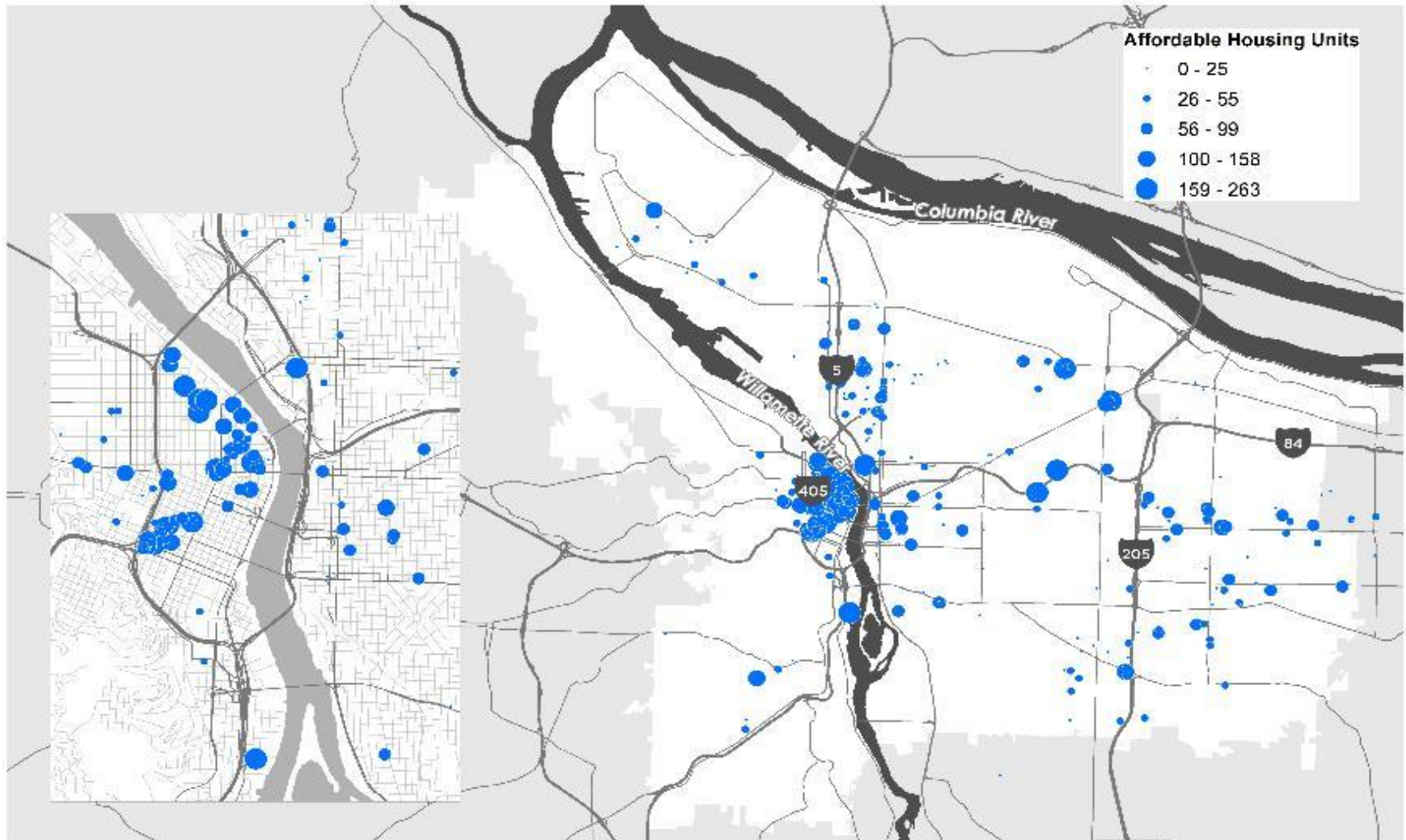
Conclusion:

Per memo shared with CAC in May, census block-level data has an extremely high margin of error such that it renders the data unusable.

Suggested factor: *Affordable housing*

Conclusion:

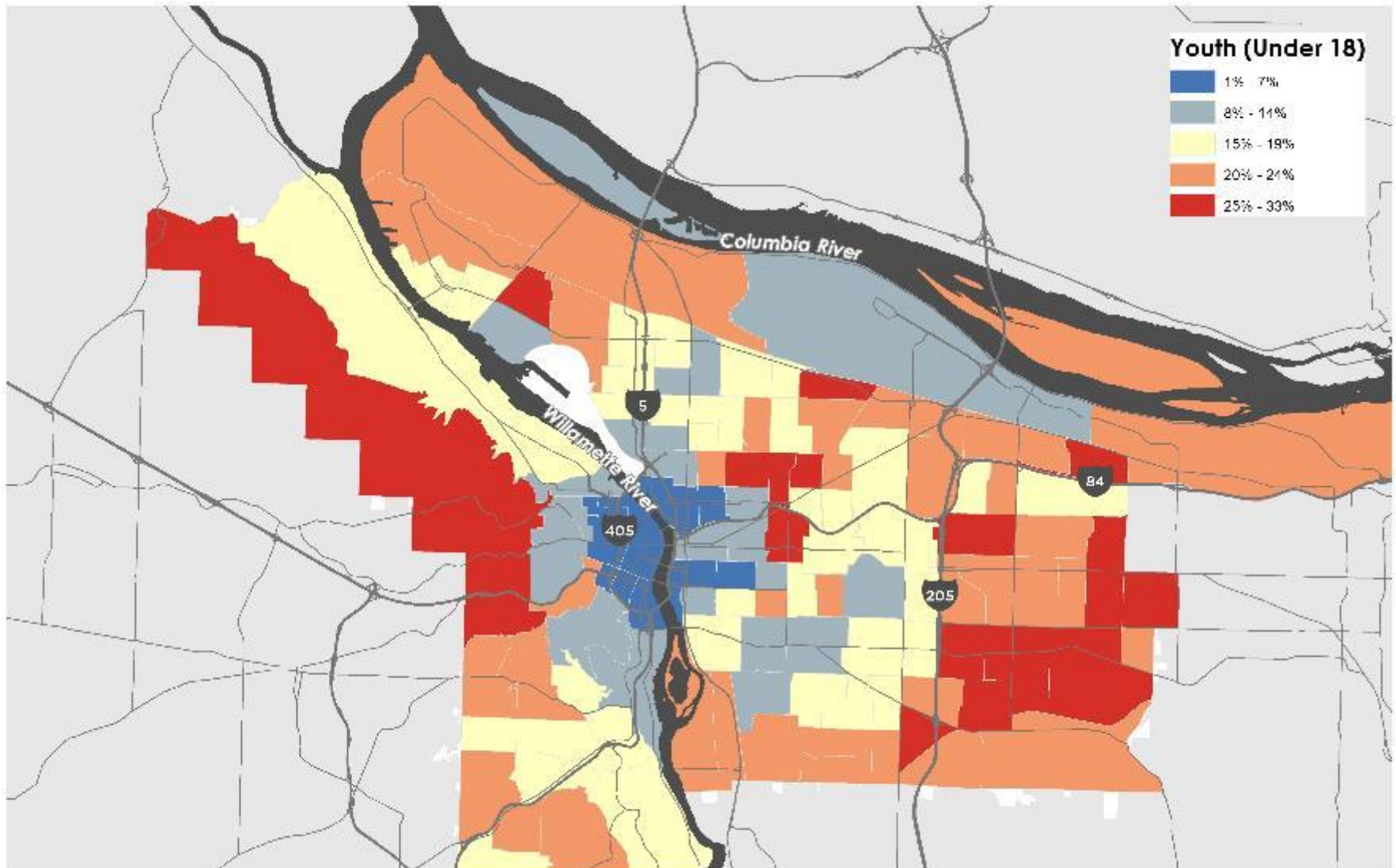
- *Density of affordable housing in other areas will pull priority away from Southwest (thereby decreasing priority in Southwest)*
- *Program implementation will factor in affordable housing locations*



Suggested factor: *Youth*

Conclusion:

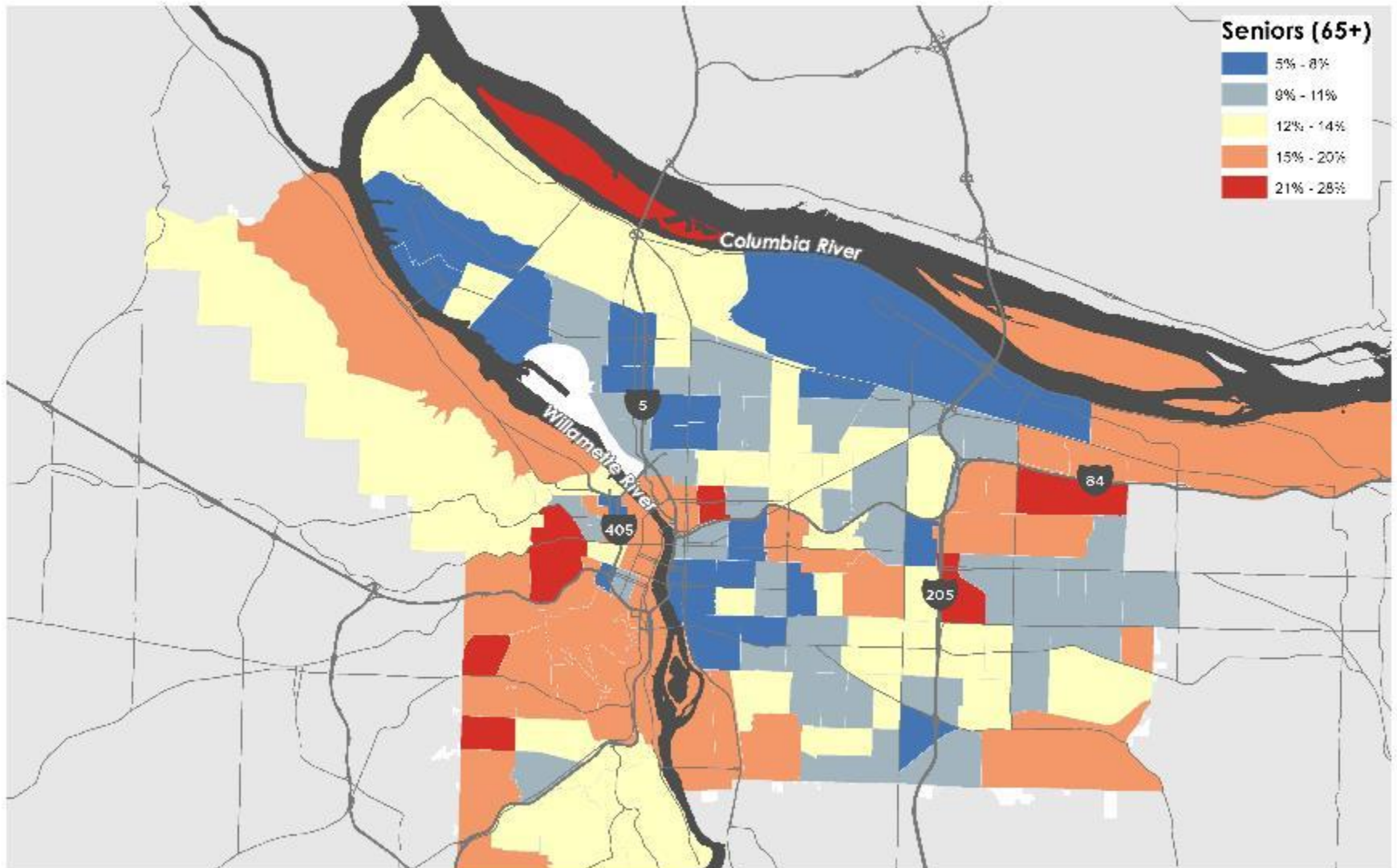
- *Does not further prioritize Southwest*
- *Age not correlative with low-income/equity concerns*



Suggested Factor: *Seniors*

Conclusion:

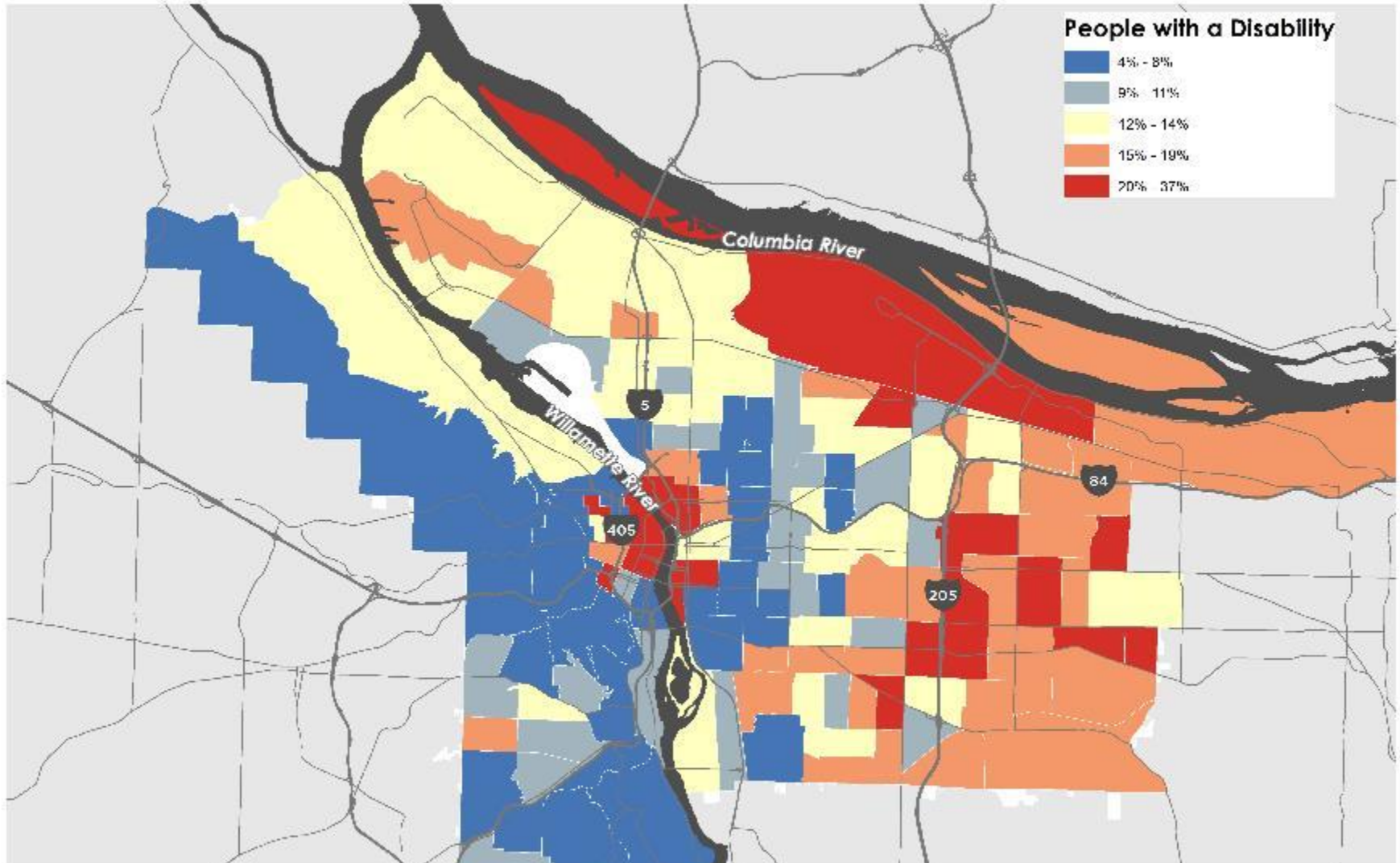
- *Does not further prioritize Southwest (spread across the city)*
- *Age not correlative with low-income/equity concerns*



Suggested Factor: *Persons with Disability*

Conclusion:

- *Per memo shared at May CAC meeting, census disability data has an extremely high margin of error such that it renders the data unusable*
- *Does not further prioritize Southwest*





Additional suggested equity factors

Suggested factor:

BPS displacement vulnerability mapping*

Conclusion:

- Work is ongoing (BPS is not yet ready to share map), but does not prioritize Southwest.
- BPS's displacement vulnerability mapping identifies other parts of town, and would decrease priority in Southwest.

* Displacement vulnerability = risk of households being priced out of housing in a given area

Suggested factor:

Housing cost burden*

Conclusion:

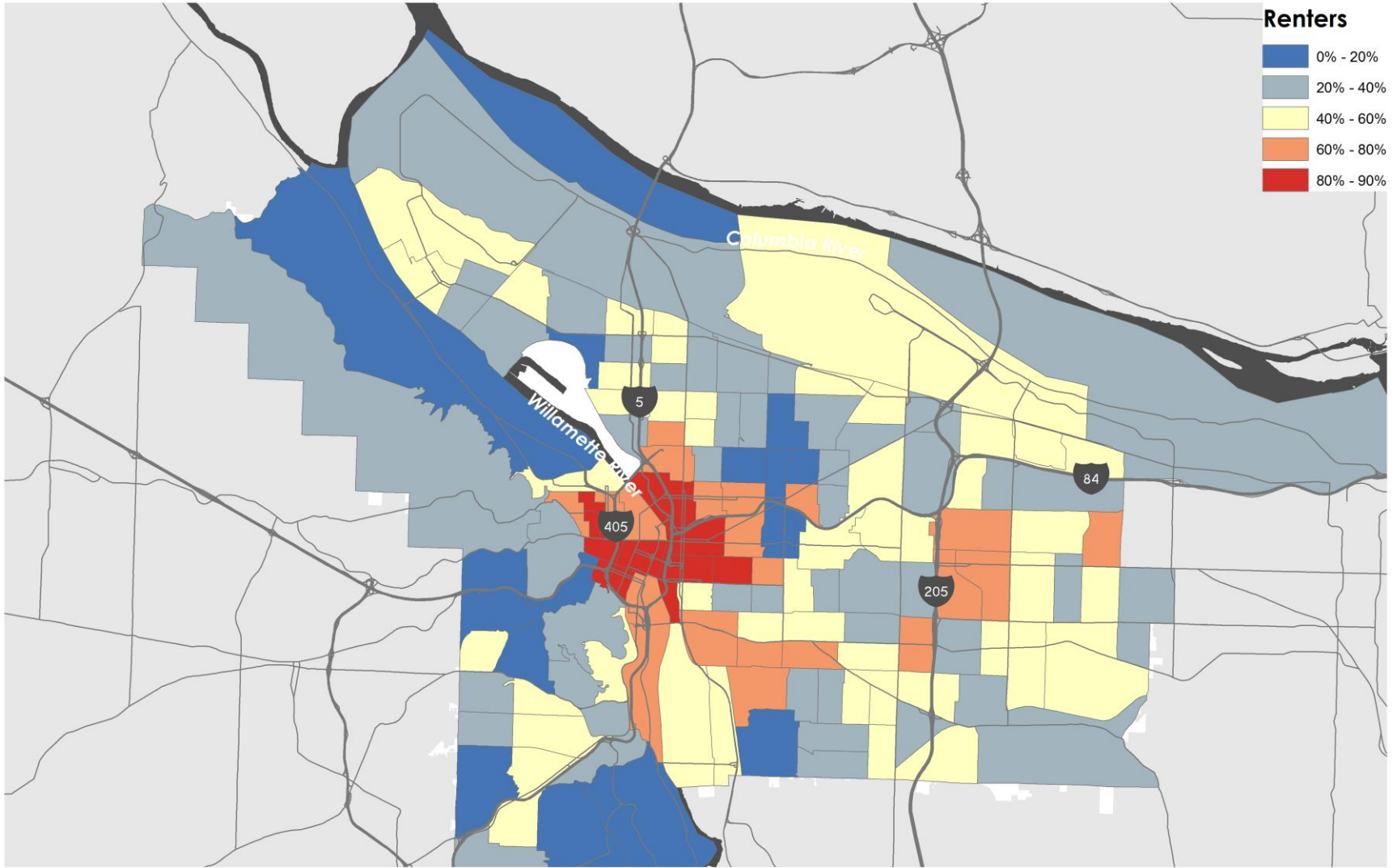
- Requires data for rents. No reliable or regularly maintained dataset known
- Were rent data readily available, would be indexed against income/census tract, which would likely pull priority away from Southwest.
- Not a practicable solution

* Housing cost burden = households that pay more than 30% of their monthly income on rent/mortgage

Suggested factor: Renters

Conclusion:

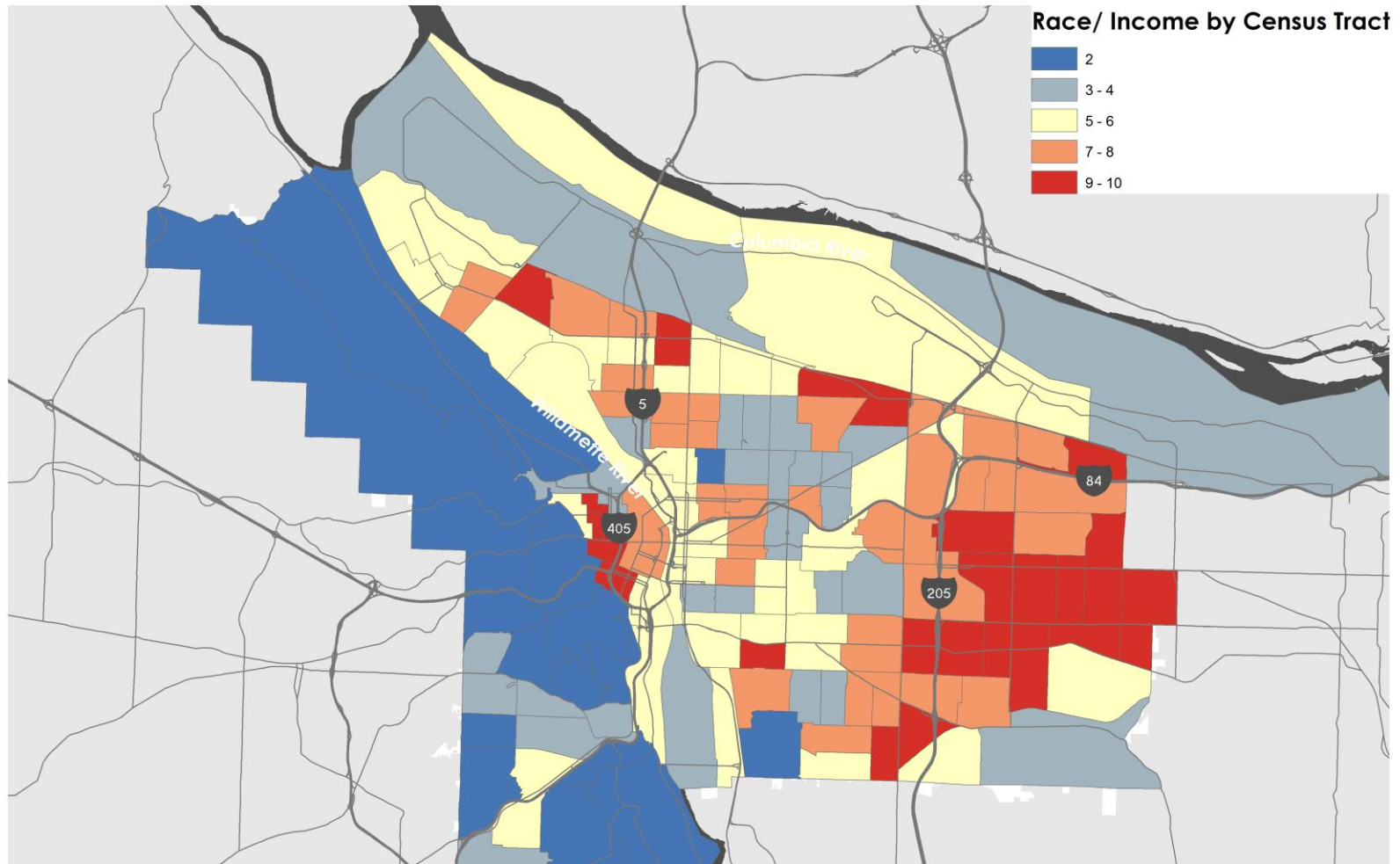
- *Given changing demographics and housing trends, not an equity factor when applied citywide*
- *Does not prioritize Southwest*



Suggested factor: Normalizing race data by population

Conclusion:

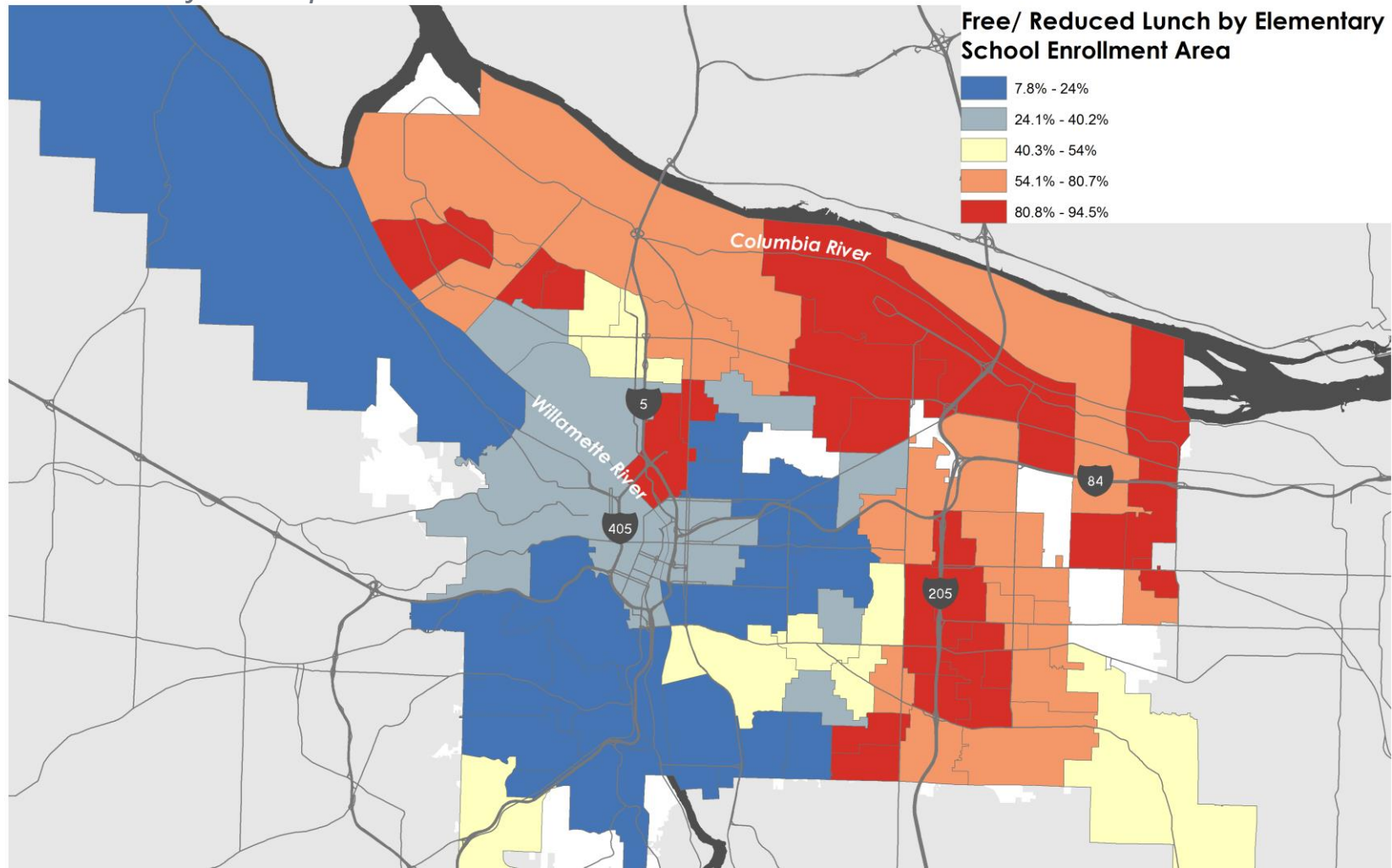
- *Using census tract population to normalize race data does provide a clearer picture of where the highest densities of low-income Portlanders live. The project team concurs with this suggested approach and will update our equity methodology accordingly.*
- *Does not further prioritize Southwest*



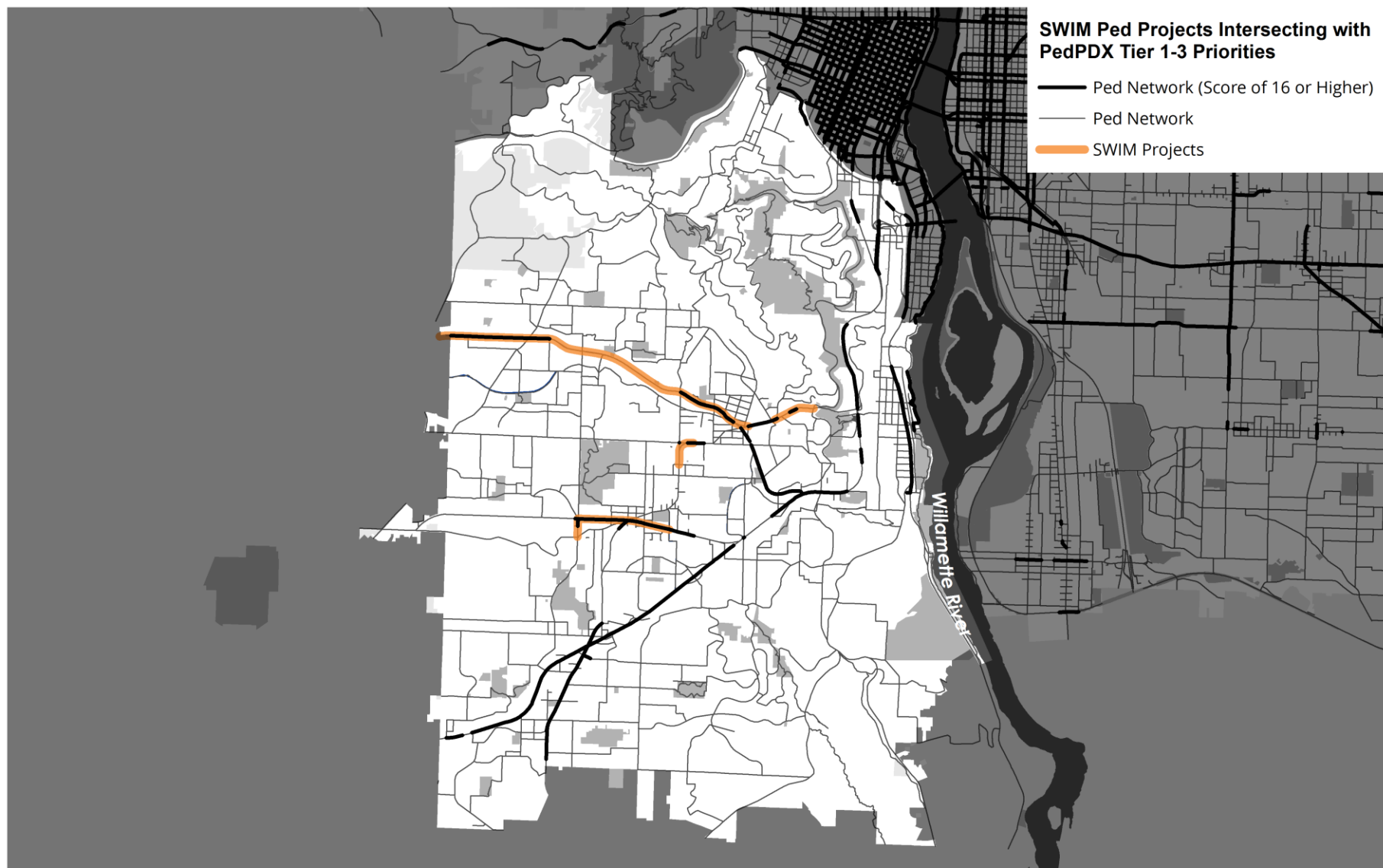
Suggested factor: Free and reduced lunch

Conclusion:

- *Redundant of income data already incorporated*
- *Different geographies (elementary school enrollment areas + census tracts) within a single equity methodology difficult to execute*
- *Dataset not complete*
- *Does not further prioritize Southwest*



Suggested approach to address geographic equity: Additional points for adopted SWIM projects within PedPDX priority segments



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Committee discussion

Final steps for draft prioritization

- Project team will make refinements to safety, equity, and demand analyses
- **Next CAC meeting:** Project team will provide maps/tables of prioritized needs applying our refined prioritization.
- Final draft methodology will be incorporated into draft PedPDX Plan document for public review (to be released in the coming months)
- Map and list of prioritized needs will be incorporated into the PedPDX Implementation Plan



Pedestrian “Toolbox”

Set back parking at crossings to improve visibility for all modes



Provide more marked pedestrian crossing opportunities

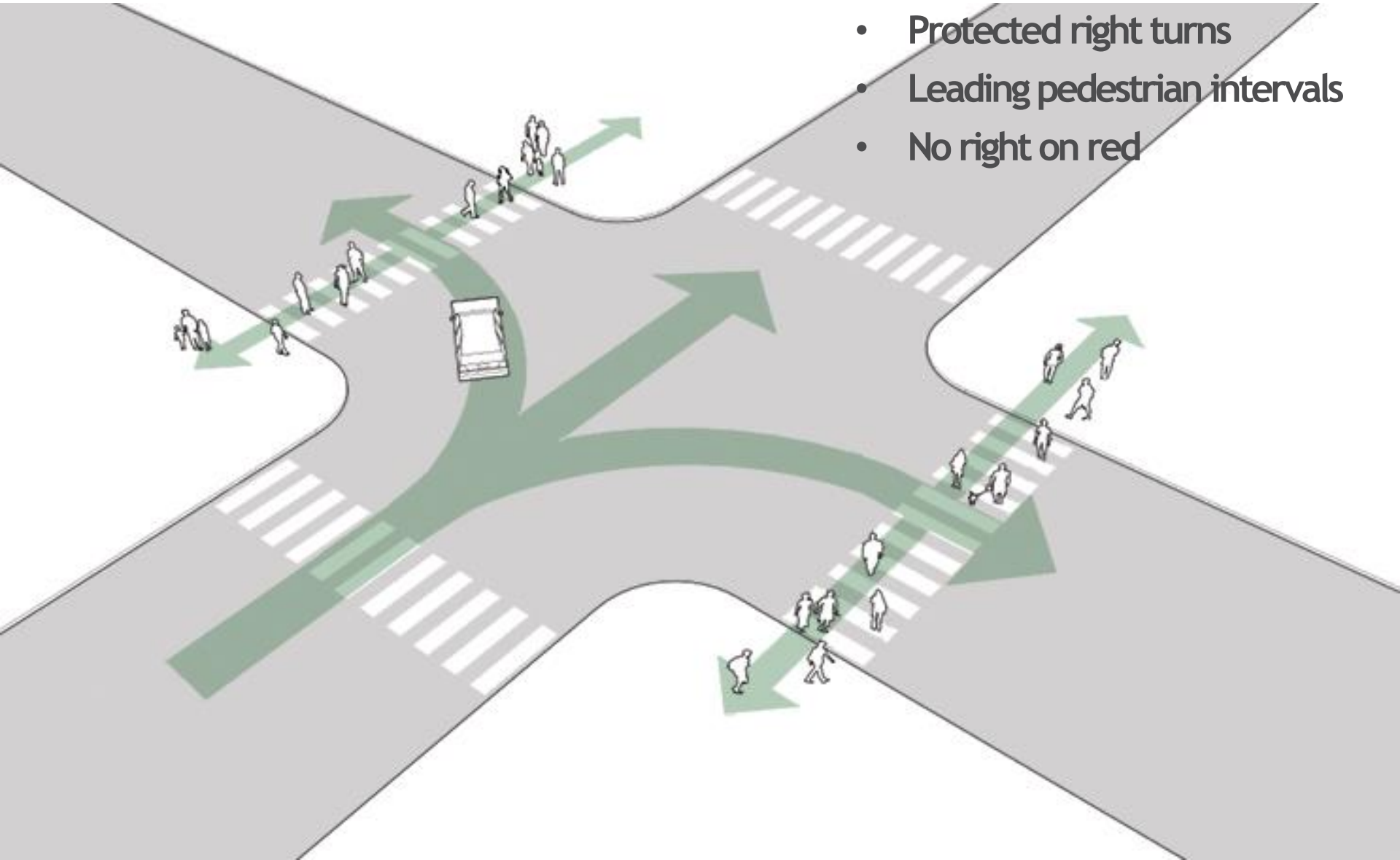


Provide marked crossings at all transit stops



Separate vehicle/pedestrian movements at signals where possible

- Protected left turns
- Protected right turns
- Leading pedestrian intervals
- No right on red



Provide high visibility crosswalks at
signalized intersections



Alternative pedestrian walkways



SW 37TH AVE
SEATTLE, WA



Alternative pedestrian walkways

NE 110 ST
SEATTLE, WA

**Improve
sidewalk
repair
program
and address
persistent
tree/sidewalk
conflicts**



Provide interim
infrastructure



Bike infrastructure that
also serves pedestrians



Car-free streets



Additional ideas

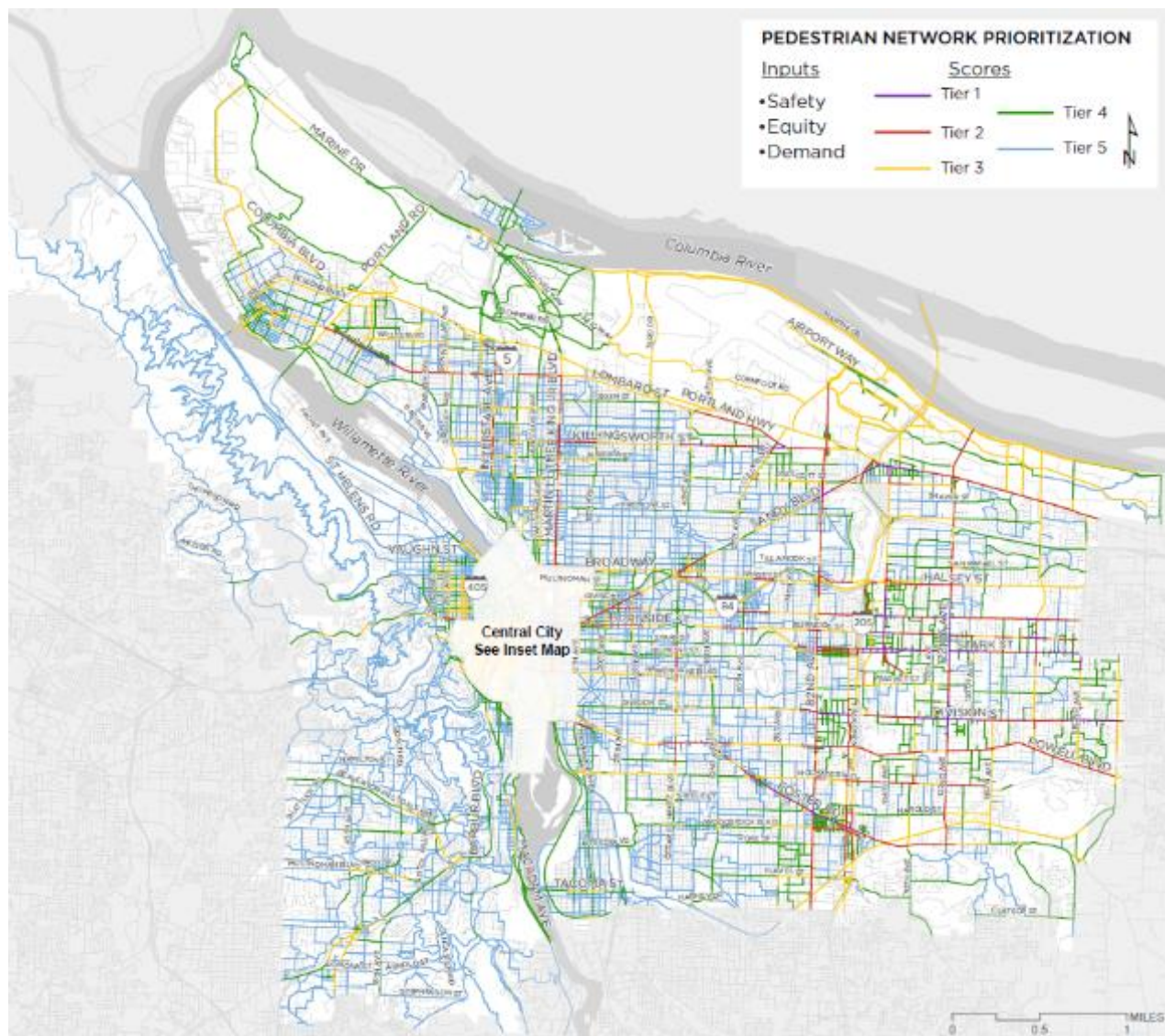
- Increase street lighting levels
- Provide benches
- Collect better pedestrian data
- Expand education and enforcement activities
- Evaluate locations where longer crossing times should be considered



Prioritization outcomes in Southwest

Tier 1 = 26-30 points
 Tier 2 = 21-25 points
 Tier 3 = 16-20 points
 Tier 2 = 11-15 points
 Tier 1 = 0-10 points

- Scoring is additive (safety + equity + demand).
- Highest scoring street in SW is 19 points.
- No alteration of any of our criteria will bump a roadway in SW to Tier 1, (26 points or more).
- Project team evaluated modifications to the equity methodology that might award an additional two points (at a minimum) such that some Tier 3 streets in SW might bump up to **Tier 2** (21 points or more)



Suggested approach to address geographic equity: Additional points for adopted SWIM projects within PedPDX priority segments

